Date:

Monday, 11/27/2006 10:05:18 AM

User:

Kim Johnston

Process Sheet

Customer

: CU-DAR001 Dart Helicopters Services

Job Number **Estimate Number** : 29698

: 10372

P.O. Number

:NA

This Issue

First Issue

Written By

Comment

Previous Run

: 11/27/2006

Prsht Rev.

: NC

: MA : 28835

: Est.

S.O. No. : NIA

: MACHINED PARTS

Type

New issue KJ/DS

Part Number

Drawing Name

: D312121

: BOLT

Drawing Number

: D3121 REV D

Project Number **Drawing Revision** : N/A

Material

Due Date

: 12/4/2006

Qty:

40 Um:

Each

Additional Product

Checked & Approved By

Job Number:



Seq. #:

Machine Or Operation:

Description:

1.0

M303H0500

303 HEX BAR



Comment: Qty.:

0.0417 f(s)/Unit Total:

1.6680 f(s)

303 HEX BAR

Material: AISI 303 SS 1/2" Hex Bar

(M303H0.500)

Batch: M102386

1 / 06/12/06

2.0

HARDINGE

HARDINGE CNC LATHE SMALL



Comment: HARDINGE CNC LATHE SMALL

1-Turn D3121-21

2-Identify as D3121-21

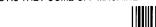
3-Deburr break all sharp edges 0.005" to 0.010"

H/1M8 06/12/01

3.0

QC2

INSPECT PARTS AS THEY COME OFF MACHINE



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0

QC8

SECOND CHECK

Comment: SECOND CHECK

5.0

PACKAGING 1

PACKAGING RESOURCE #1





Comment: PACKAGING RESOURCE #1

Identify and Stock Location: 57407

Dart Aerospace Ltd

W/O:		WORK OF	WORK ORDER CHANGES						
DATE	STEP	PROCEDURE CHANGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector		
		·							
Part No	:	PAR #: Fault Category:	NCR: Yes	No DQ	A:	Date: _			

QA: N/C Closed: ____ Date: ____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)								
		Description of NC	Corrective Action Section B			Verification	Annroval	Annroyal		
DATE	STEP	Section A	Initial Chief Eng	Action Description Chief Eng	Sign & Date	Section C	Approval Chief Eng	Approval QC Inspector		
						,				
						,				

NOTE: Date & initial all entries

Date:

Monday, 11/27/2006 10:05:18 AM

User:

Kim Johnston

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: BOLT

Job Number: 29698

Part Number: D312121

Job Number:



Seq. #:

Machine Or Operation:

Description:

6.0

QC21

FINAL INSPECTION/W/O RELEASE



Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



Dart Aerospace Ltd

W/O:			WC	RK ORDER CHANGI	ES				
DATE	STEP	PR	OCEDURE CHA	NGE	Ву	Date	Qty	Approval Chief Eng / Prod Mgr	Approvai QC Inspector
Part No	•	PAR #:	Fault Cate	gory:	NCR: Yes	No DQ	A:	Date: _	
					QA: I	N/C Close	d:	_ Date: _	
NCR:			WORK ORDI	ER NON-CONFORMA	NCE (NCI	₹)			
DATE	STEP	Description of NC		Corrective Action Section		Verific	cation	Approval	Approval
DAIL	SILF	Section A	Initial Chief Eng	Action Description Chief Eng	Sign of Date		ion C	Chief Eng	QC Inspector
				et e					

NOTE: Date & initial all entries

DART AEROSPACE LTD	Work Order:	29698
Description: Bolt	Part Number:	D3121-21
Inspection Dwg: D3121 Rev: D		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

X	First Article		Prototype
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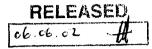
Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
0.375	+/-0.010	,370				
0.050 - 0.060	N/A	,055	1			
0.080	+/-0.010	,075	J			
10-32UNF3A	N/A					
			-			
					-	

Measured by:	S.F/Ms	Audited by:	1	Prototype Approval:	N/A
Date:	06/12/06	Date:	06/12/06	Date:	N/A

Rev		Change	Revised by	Approved
Α	04.02.27	New Issue	KJ/RF	
В	06.03.09	Dwg Rev. updated	KJ/JLM 1.A	
С	06.06.14	Dwg Rev. updated	KJ/JLM OK	
	····		. ()	/ /



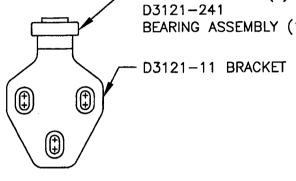
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CHEC	(EQ)	APPROVED A	DRAWING NO. REV. D
	Ms.k.	#	D3121 SHEET 1 OF 10
DATE			TITLE SCALE
06.0	5.17		BRACKET ASSEMBLY 1:2
Α		02.04.15	NEW ISSUE
В		03.01.16	ADD RIDGES; ADD MAT'L PROP; FIX P/N ADD -141/-143/-144/-145/-146
С		04.02.17	ADD CLEARANCE; USE -241 BEARING
D		06.05.17	D3121-25 CAP WAS 1.024, NOW 1.000

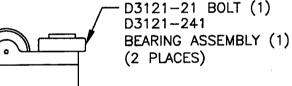


- D	3121-2	21	BOL'	Г	(1)
D	3121-2	241				
В	EARING	AS	SEM	Βl	Υ_	(1)

D3121-041 BRACKET ASSEMBLY

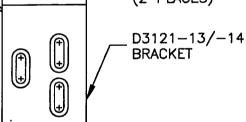
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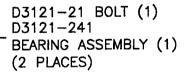




D3121-043 (SHOWN) / D3121-044 (OPPOSITE) BRACKET ASSEMBLY

(REPLACES PREMIER P/N B30-23000-37/-38)



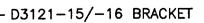


D3121-045 (SHOWN) / D3121-046 (OPPOSITE) BRACKET ASSEMBLY

(REPLACES PREMIER P/N B30423000-35/-36)

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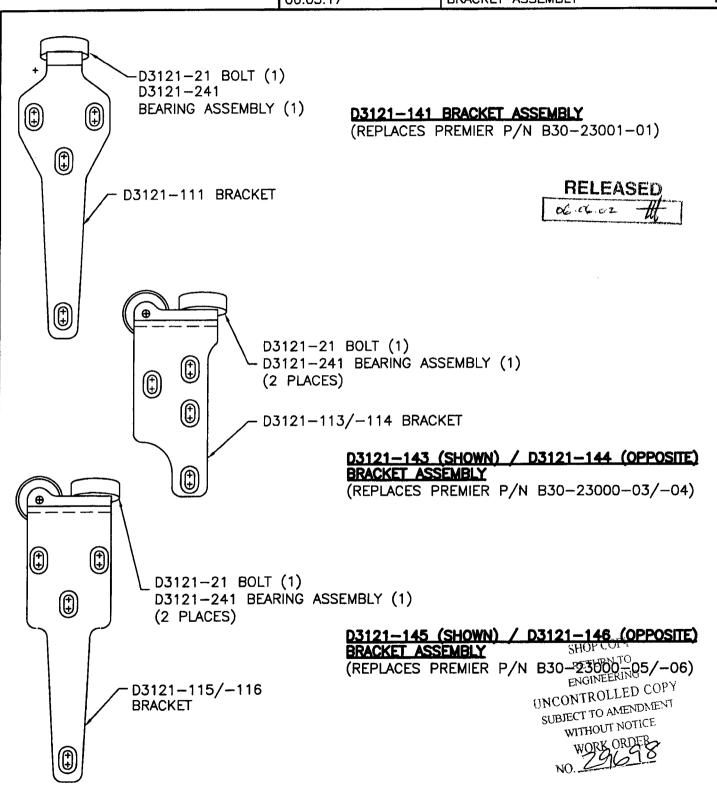
WORK ORDER



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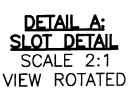
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CHECKED	APPROVED ,	DRAWING NO.	REV. D
M.K	1	D3121	SHEET 2 OF 10
DATE		TITLE	SCALE
06.05.17		BRACKET ASSEMBLY	1:2

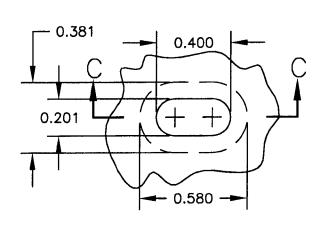


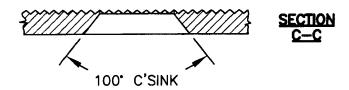
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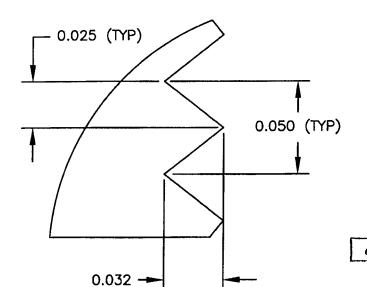
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CHECKED	APPROVED ./	DRAWING NO.	REV. D
Ms.k.	##	D3121	SHEET 3 OF 10
DATE		TITLE	SCALE
06.05.17		BRACKET ASSEMBLY	1:1







DETAIL B: RIDGE DETAIL PARTIAL SECTION **SCALE 1:20**

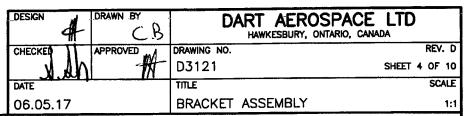


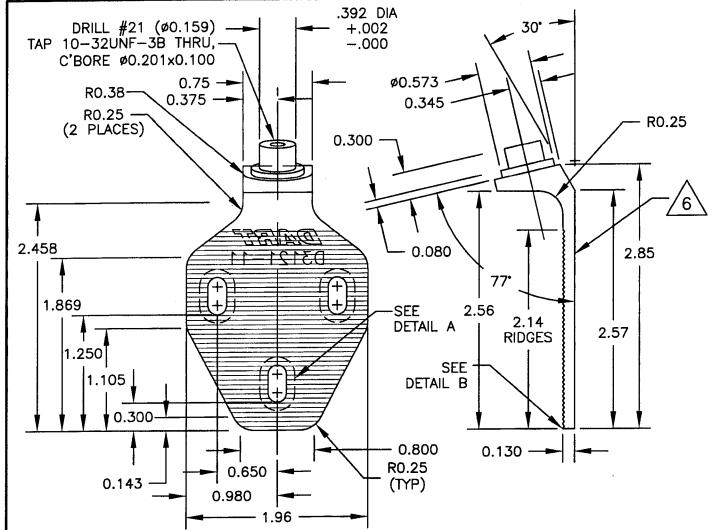
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SHOP COPY

RELEASED do do 02 0







SHOP COPY
RETURN TO
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SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 290-38

D3121-11 BRACKET

1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B)
MIN ULTIMATE TENSILE = 150 ksi

MIN YIELD TENSILE = 100 ksi

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES

4) BREAK ALL SHARP EDGES 0.005 TO 0.015

5) ENGRAVE DART P/N & LOGO AS SHOWN

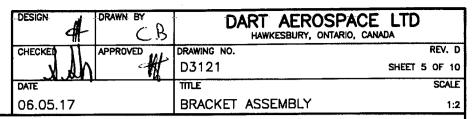
6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

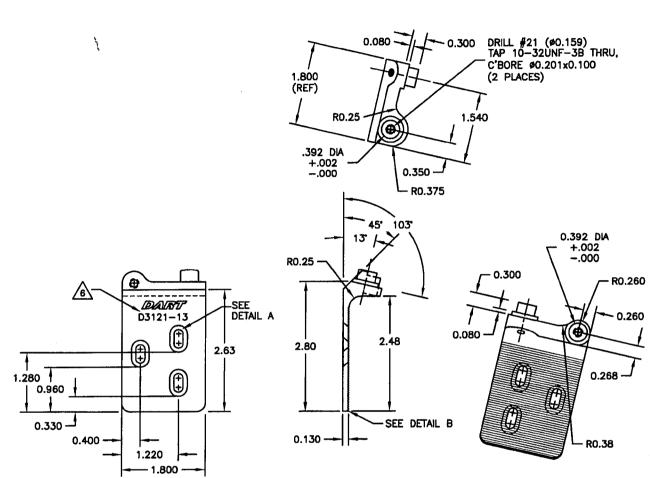
RELEASED

cle de oz

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D3121-13 BRACKET (SHOWN) D3121-14 BRACKET (OPPOSITE)

UNCONTROLLED COPY 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) SUBJECT TO AMENDMENT WITHOUT NOTICE MIN ULTIMATE TENSILE STRENGTH = 150 ksi WORK ORDER MIN YIELD TENSILE STRENGTH = 100 ksi NO. 296

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES

4) BREAK ALL SHARP EDGES 0.005 TO 0.015

5) ENGRAVE DART P/N & LOGO AS SHOWN 6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005 RELEASED

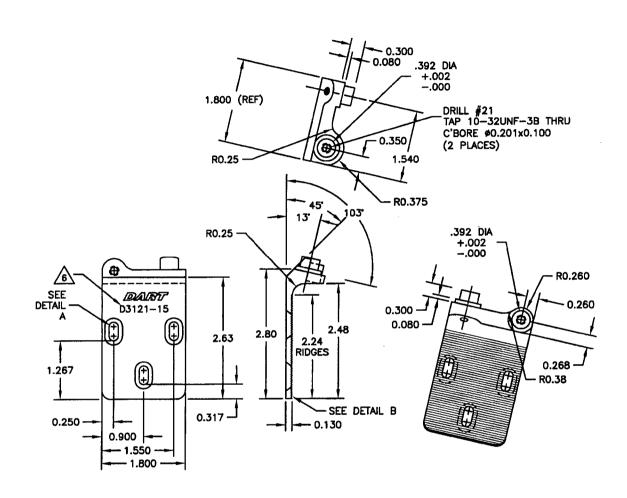
SHOP COPY RETURN TO ENGINEERING

06.002.

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CHECKED	APPROVED	DRAWING NO.	REV. D
W.K.	7 一世	D3121	SHEET 6 OF 10
DATE	-	TITLE	SCALE
06.05.17		BRACKET ASSEMBLY	1:2



D3121-15 BRACKET (SHOWN)

UNCONTROLLED COPY D3121-16 BRACKET (OPPOSITE) 1) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) SUBJECT TO AMENDMENT WITHOUT NOTICE MIN ULTIMATE TENSILE = 150 ksi MIN YIELD TENSILE = 100 ksi

2) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

3) ALL DIMENSIONS ARE IN INCHES

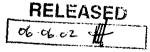
4) BREAK ALL SHARP EDGES 0.005 TO 0.015

5) ENGRAVE DART P/N AND LOGO AS SHOWN

6) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

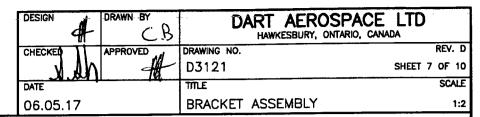
SHOP COPY RETURN TO ENGINEERING

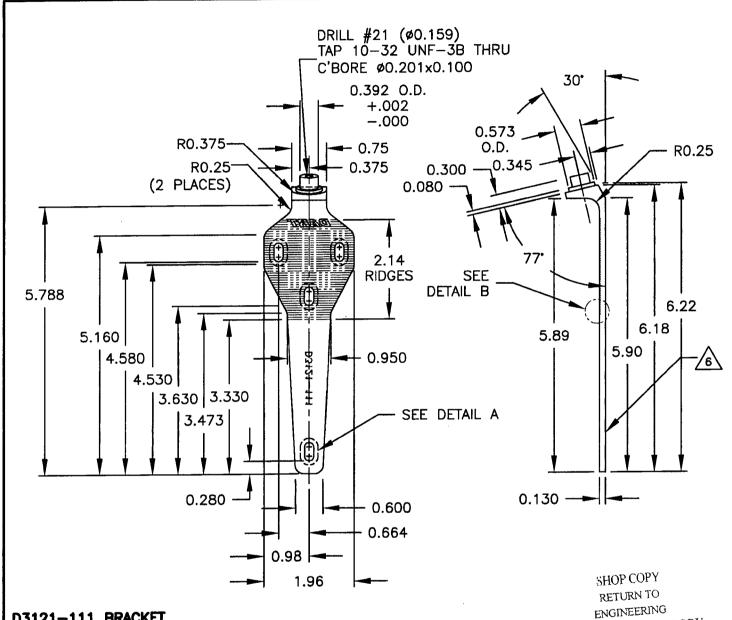
WORK ORDER



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D3121-111 BRACKET

1) REPLACES PREMIER P/N B32-23001-11

UNCONTROLLED COPY 2) MATERIAL: 17-4 SS PER AMS 5604/5643 (REF DART SPEC. M17-4-B) SUBJECT TO AMENDMENT WITHOUT NOTICE MIN ULTIMATE TENSILE = 150 ksi MIN YIELD TENSILE = 100 ksi

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHEWISE NOTED

4) ALL DIMENSIONS ARE IN INCHES

5) BREAK ALL SHARP EDGES 0.005 TO 0.015

6) ENGRAVE DART P/N & LOGO IN AREAS SHOWN

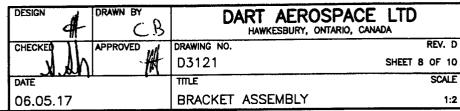
7) HOLE IN SPIGOT TO BE CONCENTRIC WITHIN 0.005

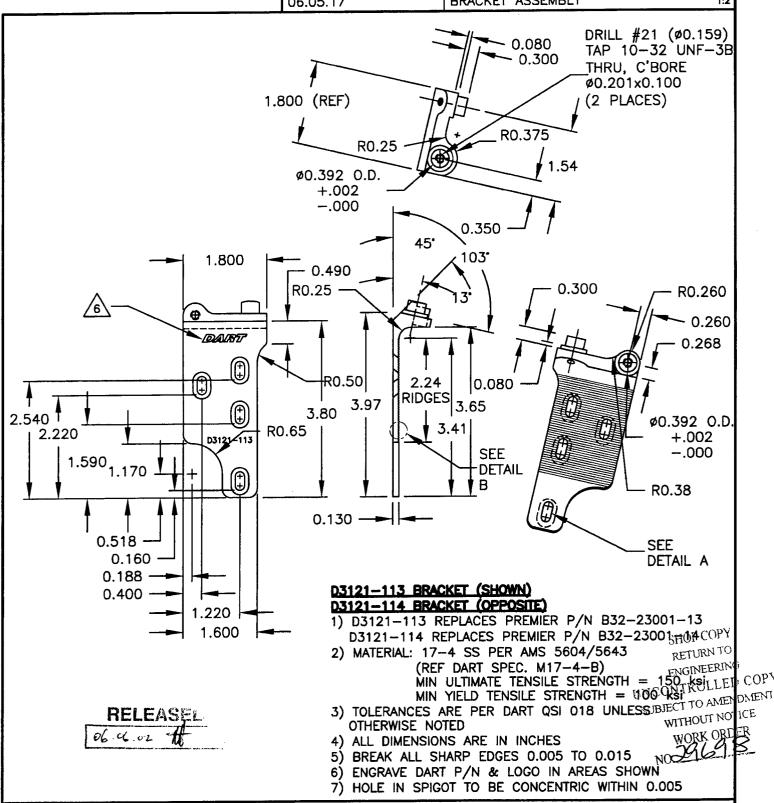
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06.06.62

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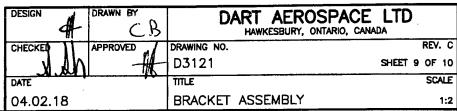


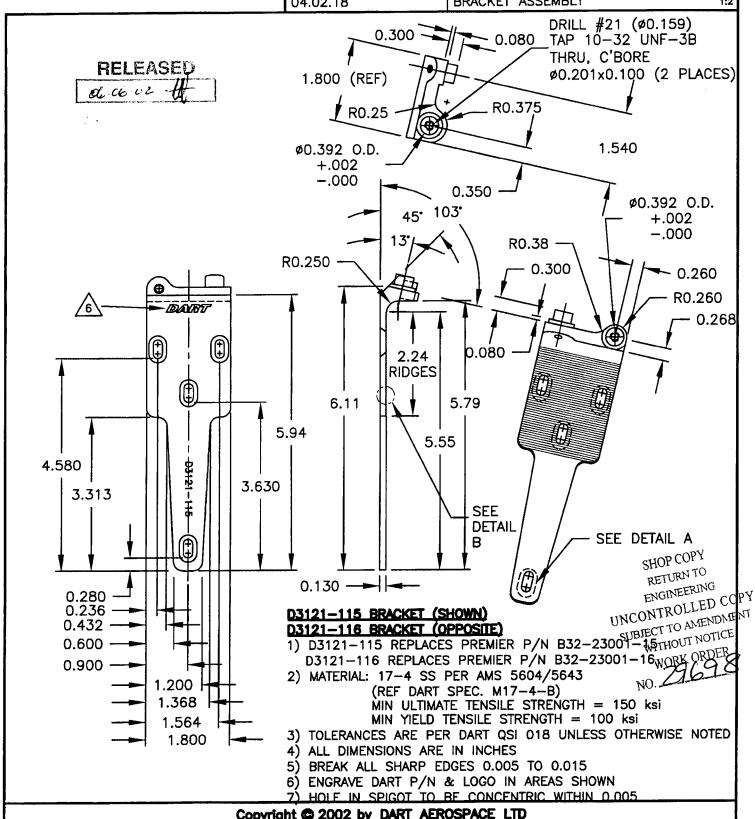




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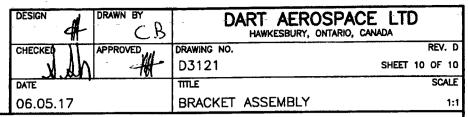


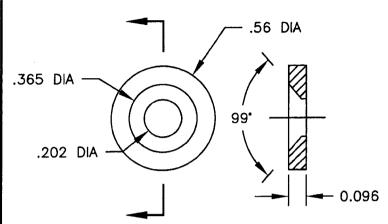




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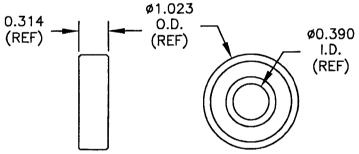






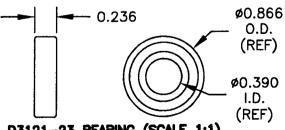


- 1) REPLACES PREMIER P/N B32-23001-17
- 2) MATERIAL: AISI 303 SS ROUND BAR, ANNEALED (REF DART SPEC. M303R)
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



D3121-19 BEARING (SCALE 1:1)

- 1) POSSIBLE SUPPLIER: KING BEARING P/N 6000-2ZJ/EM FAFNIR P/N 9100KDD
- 2) ALL DIMENSIONS ARE IN INCHES

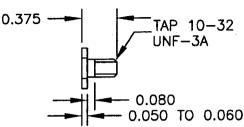


D3121-23 BEARING (SCALE 1:1)

1) POSSIBLE SUPPLIER: SKF P/N 61900-2Z OR KML P/N 6900-ZZ

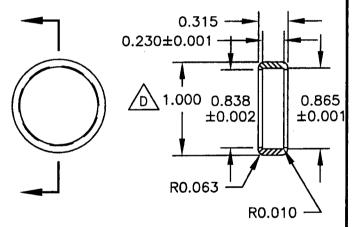
ALL DIMENSIONS ARE IN INCHES

RELEASE



D3121-21 BOLT (SCALE 1:1)

- 1) MATERIAL: AISI 303 SS HEX, ANNEALED (REF DART SPEC. M303H0.500)
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015



D3121-25 CAP (SCALE 1:1)

- 1) MATERIAL: DELRIN ROD, Ø1.25 (REF DART SPEC. M-DELRIN-R1.250)
- 2) TOLERANCES ARE PER DART QSI 018 CHINILES'S OTHERWISE NOTED
- 3) ALL DIMENSIONS ARE IN INCHES

RETURN TO ENGINEERING

UNSONTROLLED CAPECT TO SMEND WITHOUT NOTI WORK ORD NO. 29 D3121-23 **BEARING**

D3121-241 BEARING ASSEBLY (SCALE 1:1)

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